

CLASS III INTENSIVE INVENTORY FOR ALL CULTURAL RESOURCES
AT SIX PROPOSED RIPRAP STOCKPILE AREAS NEAR LAKE ASHTABULA,
BARNES COUNTY, NORTH DAKOTA

prepared for

Department of the Army
St. Paul District, Corps of Engineers
1135 U.S. P.O. & Custom House
St. Paul, Minnesota, 55101

(PURCHASE ORDER NO. DACW37 80-M-2386)

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input checked="" type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By _____	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

by

Michael L. Gregg
University of North Dakota Archaeological Research
Department of Anthropology and Archaeology
University of North Dakota
Grand Forks, North Dakota 58201

August 8, 1980

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) CLASS III INTENSIVE INVENTORY FOR ALL CULTURAL RESOURCES AT SIX PROPOSED RIPRAP STOCKPILE AREAS NEAR LAKE ASHTABULA, BARNES COUNTY, NORTH DAKOTA		5. TYPE OF REPORT & PERIOD COVERED
7. AUTHOR(s) Michael L. Gregg		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS University of North Dakota Archaeological Research Grand Forks, ND 58201		8. CONTRACT OR GRANT NUMBER(s) DACW37-80-M-2386
11. CONTROLLING OFFICE NAME AND ADDRESS U.S. Army Engineer Dist., St. Paul 1135 USPO & Custom House St. Paul, MN 55101		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE August 8, 1980
		13. NUMBER OF PAGES 27 pages
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) ARCHAEOLOGY LAKE ASHTABULA		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) A Class III Intensive Inventory for all cultural resources was conducted at six, proposed, riprap stockpile areas and one access road near Lake Ashtabula for the St. Paul District, Corps of Engineers. No cultural resource site were located at any of the six locations or access road. No further cultural resource work is recommended.		

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED
SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

ABSTRACT

A Class III Intensive Inventory for all cultural resources was conducted at six, proposed, riprap stockpile areas and one access road near Lake Ashtabula for the St. Paul District, Corps of Engineers. No cultural resource sites were located at any of the six locations or access road. No further cultural resource work is recommended.

INTRODUCTION

The purpose of this report is to present the results of a study designed to determine whether significant cultural remains exist in areas proposed for landscape modification, in the form of riprap stockpiling, by the Corps of Engineers. Six, alternate, stockpile locations and one, short, access road were surveyed for cultural resources (Figures 1 and 2). Locations #1 through #6 are referred to as the surveyed areas. Information recovery and reporting are designed to meet North Dakota's "Class III Intensive Inventory" guidelines (North Dakota State Historic Preservation Office 1980:12-13). This was a "systematic, detailed field inspection" conducted by a professional archaeologist for the purpose of offering National Register and North Dakota State Historic Sites Registry eligibility evaluations for possible cultural sites in the surveyed areas.

The fieldwork was accomplished on August 1, 1980 by Michael L. Gregg. Project records are on file at the Department of Anthropology and Archaeology, Babcock Hall, University of North Dakota. No artifact collections were made.

Numbers and locations of surveyed areas were coordinated with Dave Berwick of the St. Paul Corps. The Baldhill Dam Superintendent, Charlie Adams, was consulted regarding location #6. The legal descriptions in which the surveyed areas are situated are:

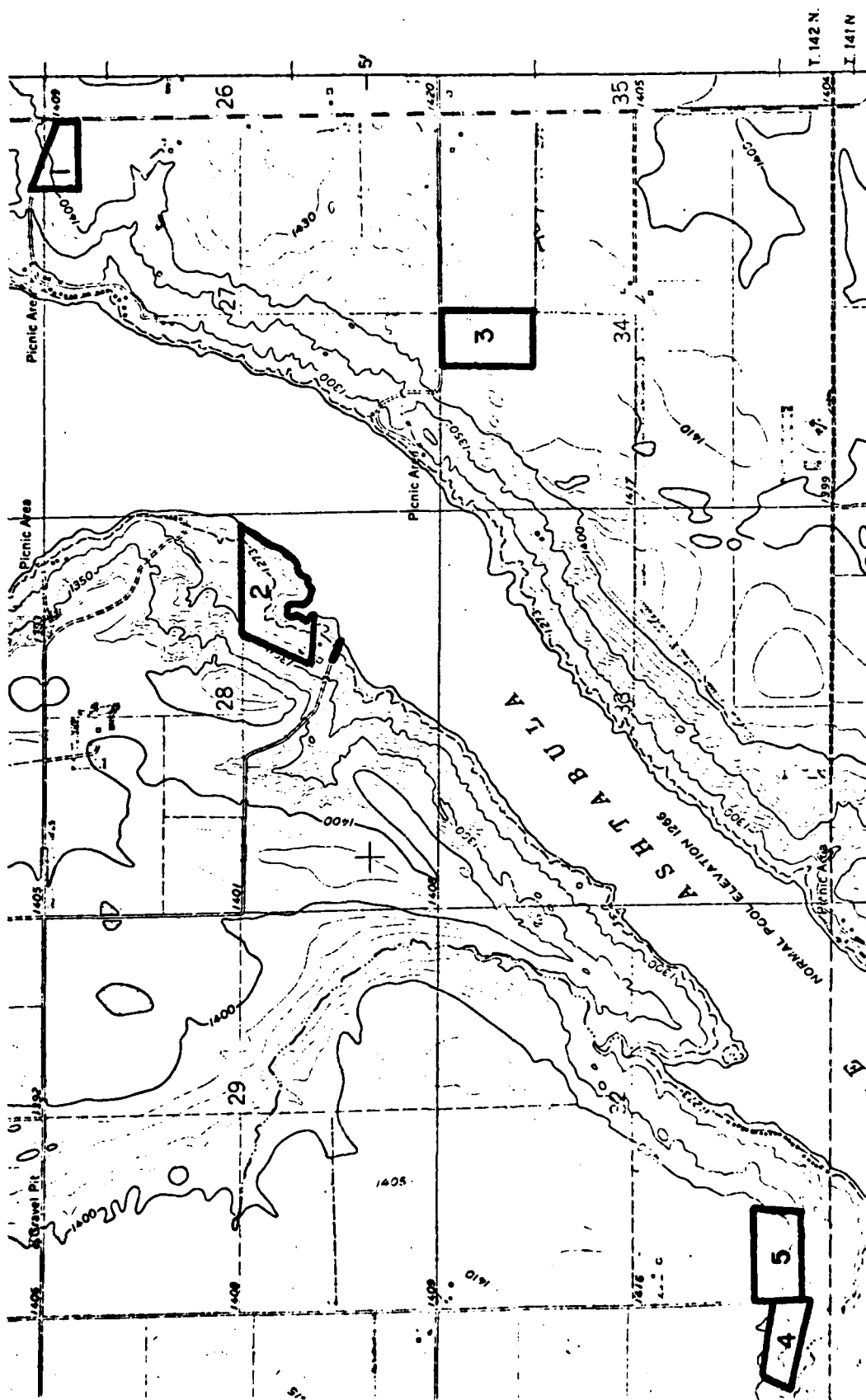


Figure 1. Locations of five of the proposed, stockpile areas in T142N, R58W, Barnes County, ND. From U.S.G.S. 7.5' Baldhill Dam quadrangle.

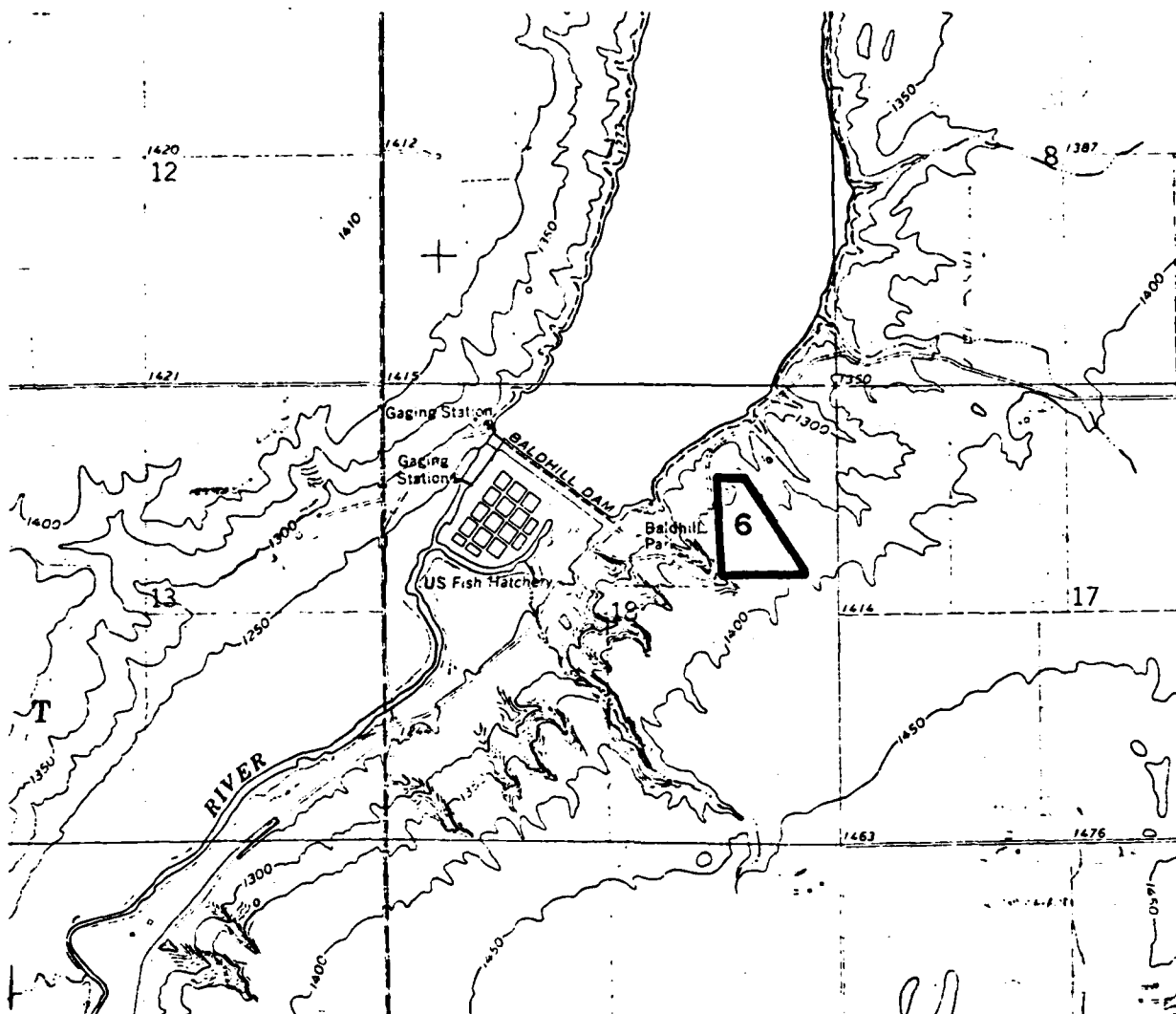


Figure 2. Location #6 in T141N, R58W, Barnes County, ND. From U.S.G.S. 7.5' Baldhill Dam quadrangle.

Location #1: N $\frac{1}{2}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, Sec. 27, and SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 22, T142N, R58W

Location #2: N $\frac{1}{2}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 28, T142N, R58W

Location #3: E $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$, Sec. 34, T142N, R58W

Location #4: SE $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 31, T142N, R58W

Location #5: SW $\frac{1}{4}$ SW $\frac{1}{4}$, Sec. 32, T142N, R58W

Location #6: SE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$, Sec. 18, T141N, R58W

Access road: SE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 28, T142N, R58W

ENVIRONMENT

LOCATION #1

This location is pastureland on a sloping side-hill to the south of an ephemeral, tributary drainage of the Sheyenne River (Figure 3). Parts of the area were formerly cultivated as evidenced by recently constructed, large rockpiles. Surface visibility was fair. This location is just southeast of Bayshore Yamaha.

LOCATION #2

This location, including a short, access road, is predominantly a hay meadow, but also includes a recreational-cottage area on a small bay of Lake Ashtabula, and a gravel pit (Figure 4). All surface at this location is disturbed by recent, human activity.

LOCATION #3

This entire location is agricultural land, covered by wheat at the time of survey (Figure 5). The soil is a brown, fine, sandy loam. There

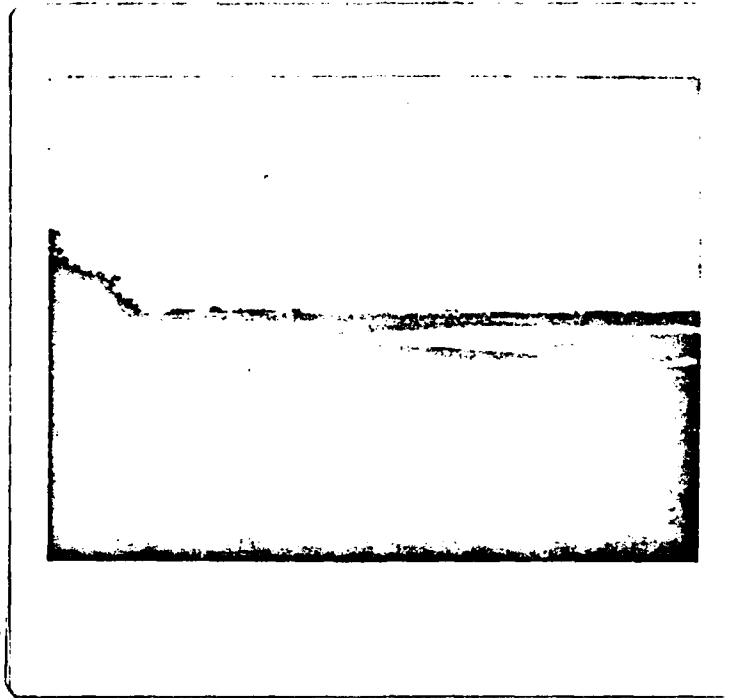


Figure 3. Location #1, view to the southwest.

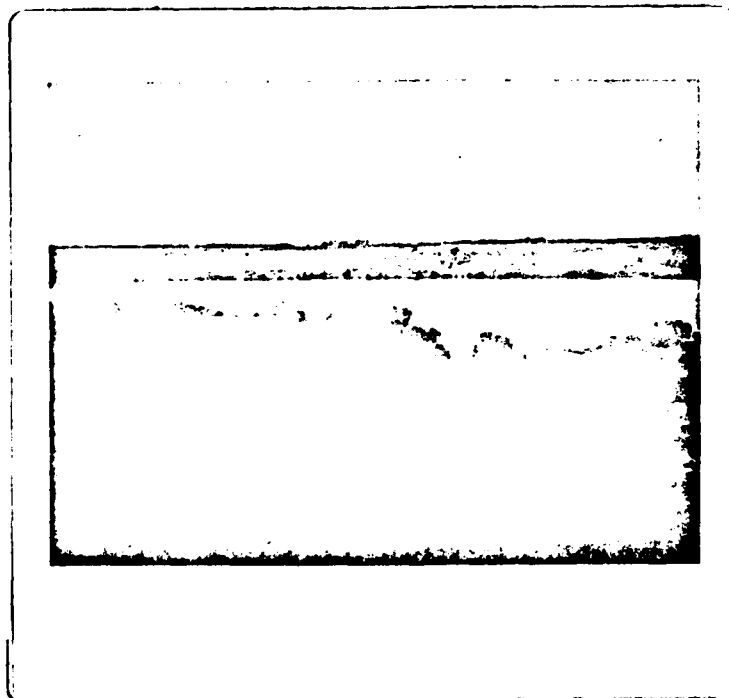


Figure 4. Location #2, view to the east.

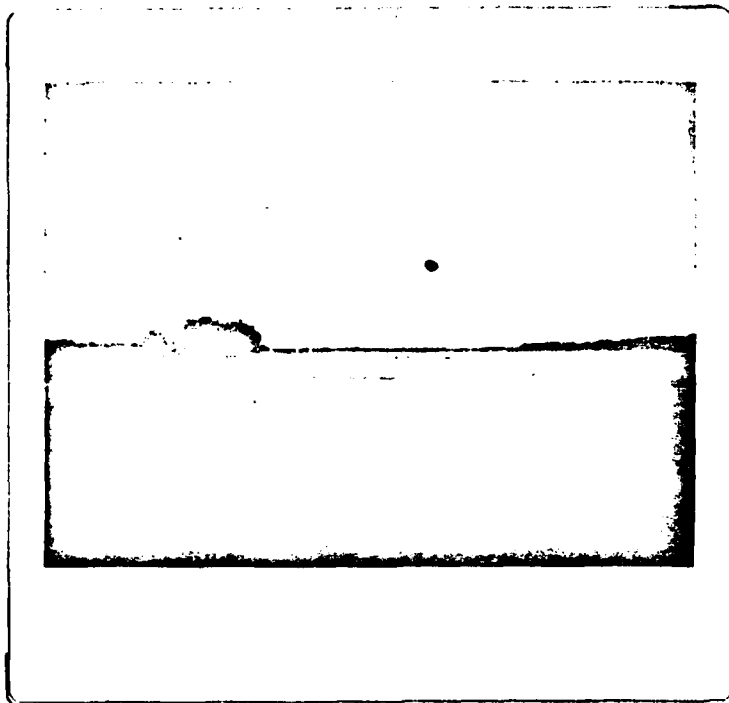


Figure 5. Location #3, view to the east.

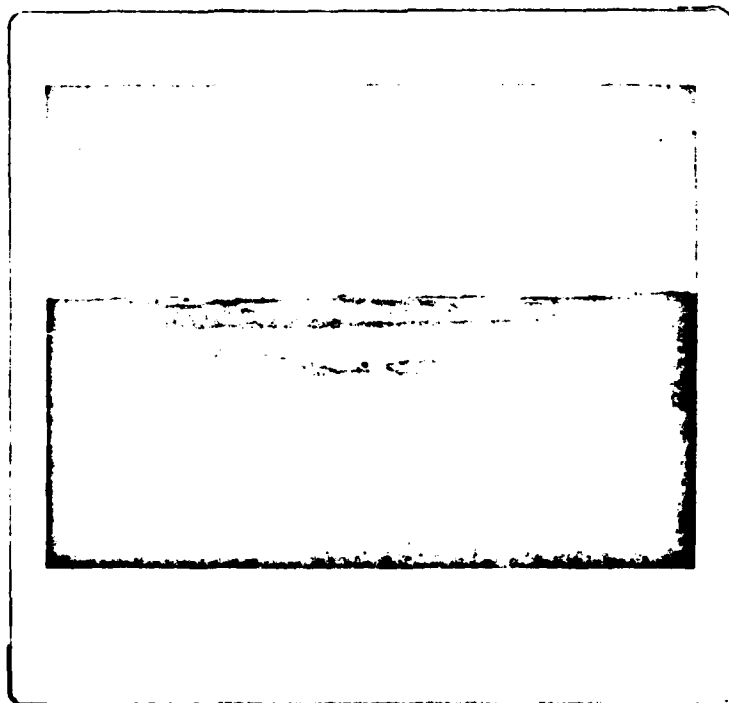


Figure 6. Location #4, view to the southeast.

are fine-grained, relatively good quality quartzites in the glacial till here suitable for fabricating certain stone tools.

LOCATION #4

This location is currently pastureland situated on the upland plain on the north side of a drainage tributary to the Sheyenne (Figure 6). Several, large, boulder piles show the field was cleared and cultivated in the past. Soil is a dark brown, fine, sandy loam with gravel.

LOCATION #5

This is agricultural land immediately adjacent, and directly across the gravel road to the east from location #4 (Figure 7). This was a wheat field that failed in 1980 from drought and the owner had recently turned cattle loose into it. It is at the edge of the high, upland plain above the Sheyenne, and a likely camp or lookout location. Immediately adjacent to the south and east the land breaks off down to the drainage bottoms. This location is entirely cultivated and cleared of large rock. The soil is brown, fine, sandy loam, heavy in gravels and cobbles.

LOCATION #6

This location is pasture immediately adjacent to the east of an area designated for tent camping (Figure 8). Soil here is dark brown, fine, sandy loam, heavy in shale, gravel, and cobbles. Gravel and soil have been stockpiled here in the past.



Three separate photographs make up this false color composite of Lake Ashtabula. The Corps of Engineers often uses aerial photographs such as this one when studying vegetation of specific areas. One inch on this photograph represents one mile.

Figure 7. Location #5, aerial from St. Paul District, Corps of Engineers pamphlet 1979-667-255.

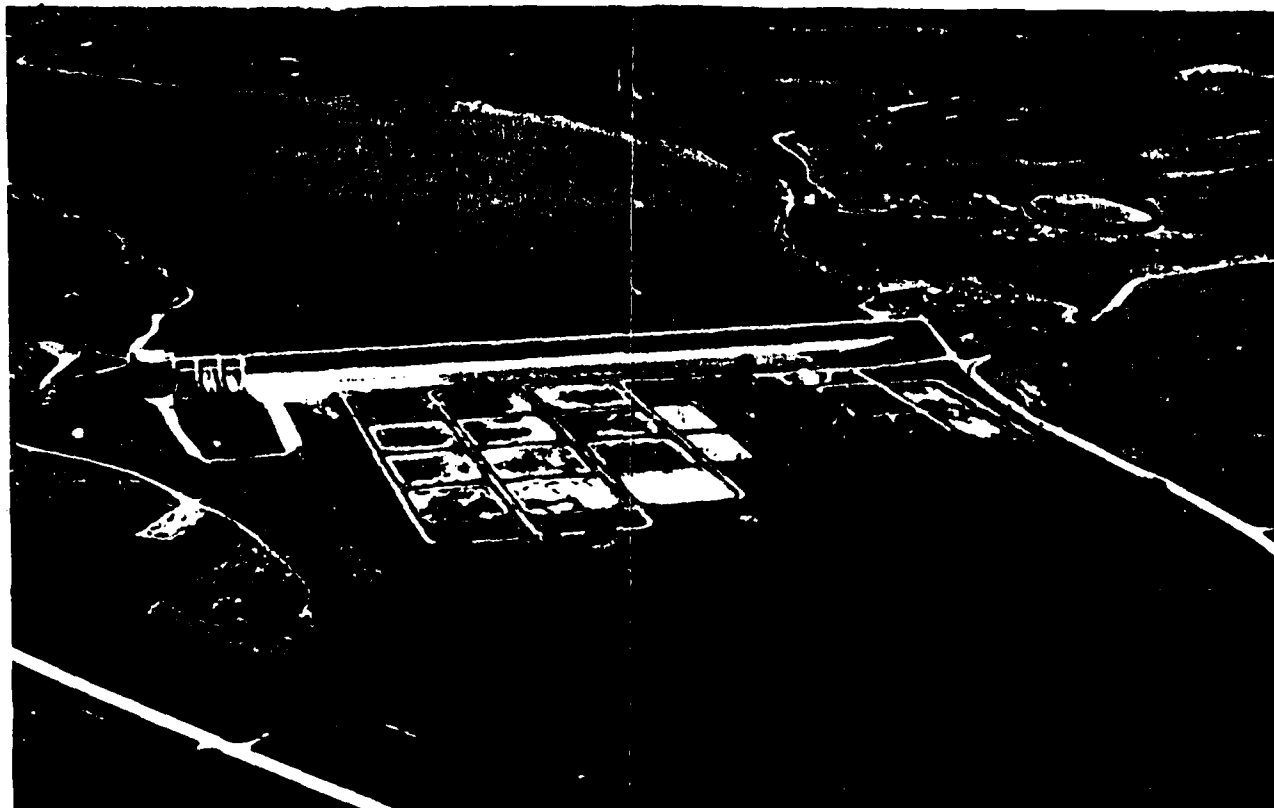


Figure 8. Location #6, aerial from St. Paul District, Corps of Engineers pamphlet 1979-667-255.

PROJECT GOALS

The goals of the project were to locate and record any prehistoric or historic cultural sites within the surveyed areas. Secondly, any potential cultural resource information would have been tied into results from recent, major, cultural resource investigations reported by Fox (1980) for the immediate vicinity.

METHODS

LITERATURE AND FILE SEARCHES

Literature and file searches were conducted at the University of North Dakota. (Subsequent to this report all file searches will be conducted at the State Historical Society of North Dakota.) Maps and records from the Fox (1980) project were examined. The historic sites files and the site files were also checked, with negative results. No cultural resource sites are recorded for the six, proposed, stockpile areas and the access road location.

FIELDWORK

Most areas were surveyed on-the-ground by walking parallel transects at approximate 15 m intervals. Exceptions were the steeply sloping side-hills at locations #1, #4, #5, and #6. Shovel testing was conducted at location #4 only; here four shovel tests were screened through ¼-inch mesh with negative results from an area at the edge of the uplands with good site potential.

EVALUATION OF RESEARCH

At location #1 surface visibility was fair. There was very low site potential on the sloping hillside.

At location #2 site potential seemed fair, and there were good exposures along the shoreline, around the gravel pit, in gardens, in rodent burrows, and along the roads and trails. The landowner here was interviewed and was not aware of any Indian artifacts ever having been found in this bottom area.

At location #3 visibility in the wheat field was generally good, with numerous large areas of exposure resulting from rodent disturbance. There was also fair surface visibility between rows. This location is not a likely camp or kill area, removed as it is from the edge of the valley and any view.

At location #4 the site potential seems good and there is fair surface visibility.

Location #5, like #4, seems to have excellent site potential, however, visibility was good in the wheat stubble and no artifacts were evident on the surface. There is no chance of buried deposits atop the uplands in this till.

Location #6, like #3, is back from the uplands' edge and most of it is a fairly steep valley slope. Visibility was fair to good.

INVENTORY OF RESOURCES

No cultural resource sites were recorded by this project. At location #3 there is a recent trash dump on the western fenceline. This trash is in the form of Old Milwaukee beer cans, scrap tin, and appliances dumped atop a rockpile from field clearing. There has been some fairly recent trash dumping at Location #4 also; this trash is in the form of Shasta diet cola cans, a power lawn mower, and miscellaneous tin and iron scraps.

EVALUATION OF RESOURCES

No National Register eligible sites are inventoried for the six surveyed areas.

STATEMENT OF IMPACTS

No cultural resource sites will be impacted by the proposed, stockpile and access road activities.

RECOMMENDATIONS

No further cultural resource work is recommended. In the event any cultural resources not reported here are encountered during the implementation of the proposed action, the State Historic Preservation Office of North Dakota should be notified immediately (701-224-2672) and it is incumbent upon the Corps to protect the resources from disturbance until a professional examination can be made or until some other form of clearance to proceed is authorized by the State Historic Preservation Office or its designated representative.

REFERENCES CITED

Fox, Richard A.

- 1980 1978-1979 cultural resource investigations along the middle Sheyenne River valley including Lake Ashtabula and a portion of the Sheyenne River. Department of Anthropology and Archaeology, University of North Dakota, Grand Forks.

North Dakota State Historic Preservation Office

- 1980 Interim guidelines for cultural resources inventory projects. Division of Archeology and Historic Preservation, State Historical Society of North Dakota, Bismarck.

APPENDIX A:

SCOPE OF WORK CULTURAL RESOURCES INVESTIGATION OF STOCKPILE AREAS AT LAKE ASHTABULA RESERVOIR

1.00 INTRODUCTION

1.01 The Contractor will undertake a cultural resources reconnaissance inventory of an access road and four proposed stockpile areas for riprap placement along Lake Ashtabula, North Dakota.

1.02 This cultural resources inventory is in partial fulfillment of the obligations of the St. Paul District, Corps of Engineers, regarding cultural resources, as set forth in the Historic Preservation Act of 1966 (P.L. 89-665), the National Environmental Policy Act of 1969 (P.L. 91-190), Executive Order 11593 for the Protection and Enhancement of the Cultural Environment (13 May 1971, 36 C.F.R. 8921), the Archaeological Conservation Act of 1974 (P.L. 93-291), the Advisory Council on Historic Preservation's "Procedures for the Protection of Historic and Cultural Properties" (36 C.F.R. Part 800), the Department of the Interior's guidelines concerning cultural resources (36 C.F.R. Part 60), and Corps of Engineers Regulations (ER 1105-2-460) "Identification and Administration of Cultural Resources" (Federal Register, 3 April 1978).

1.03 The above mentioned laws establish the importance of Federal leadership, by the various responsible agencies, in locating and preserving cultural resources within project areas. Specific steps to comply with these laws, particularly as directed in P.L. 93-291 and E.O. 11593, are being taken by the Corps "...to assure that Federal plans and programs contribute to the preservation and enhancement of non-federally owned sites, structures and objects of historical, architectural, or archaeological significance." A part of that responsibility is to locate, inventory, and nominate to the Secretary of the Interior all such sites in the project area that appear to qualify for listing on the National Register of Historic Places.

1.04 Executive Order 11593 further directs Federal agencies "...to assure that any federally owned property that might qualify for nomination is not inadvertently transferred, sold, demolished or substantially altered." In addition, the Corps is directed to administer its policies, plans and programs in such a way that federally and non-federally owned sites, structures, and objects of historical, architectural or archaeological significance are preserved and maintained for the inspiration and benefit of the people.

1.05 This cultural resources investigation will serve several functions. The report will be a planning tool to aid the Corps in meeting its obligations to preserve and protect our cultural heritage. It will be a comprehensive, scholarly document that not only fulfills federally mandated legal requirements but also serves as a scientific reference for future professional studies. It will identify sites which may require additional investigations and which may have potential for public-use development. Thus, the report's content must be analytical in nature, not just descriptive.

2.00 PROJECT DESCRIPTION

2.01 Lake Ashtabula Reservoir, completed in 1950, includes approximately 78 miles of shoreline at the normal pool elevation of 1266. The St. Paul District owns 7,816 acres of land for operating the reservoir, with approximately 2,386 acres above the normal pool level. Erosion, however, has resulted in the loss of federally owned land to the extent that in certain areas private ownership extends down to the water's edge. The Corps is currently developing plans for a riprap shoreline protection program to prevent further erosion.

2.02 The first stage of this erosion program was conducted during the 1978-79 construction year. The areas proposed as stockpile areas and access roads were surveyed under contract with the University of North Dakota, and the results are included in a report entitled 1978-1979 Cultural Resource Investigations Along the Middle Shevenne River Valley Including Lake Ashtabula and a Portion of the Shevenne River. This survey, however, did not investigate the access road and four stockpile areas currently being proposed.

3.00 DEFINITIONS

3.01 For the purpose of this study, the cultural resources investigation will include a Phase I on-the-ground reconnaissance level survey. Phase II testing will not be conducted at this time.

3.02 "Cultural resources" are defined to include any building, site, district, structure, object, data, or other material relating to the history, architecture, archaeology, or culture of an area.

3.03 "Phase I cultural resources survey" is defined as an intensive, on-the-ground survey and testing of an area sufficient to determine the number and extent of the resources present and their relationship to project features. A Phase I cultural resources survey will result in data adequate to assess the general nature of the sites present; a recommendation for additional testing of those resources which, in the professional opinion of the Contractor may provide important cultural and scientific information; and detailed time and cost estimates for Phase II testing.

3.04 "Phase II testing" is defined as the intensive testing of those sites which may provide important cultural and scientific information. Phase II testing will result in data adequate to determine the eligibility of the resources for inclusion on the National Register of Historic Places, a plan for the satisfactory mitigation of eligible sites which will be directly or indirectly impacted, and detailed time and cost estimates for mitigation.

4.00 STUDY AREA

4.01 The Contractor will conduct on-the-ground surveys in the following areas near Lake Ashtabula Reservoir, in Barnes County, North Dakota (refer to inclosed map for more detail):

a. Four proposed stockpile areas

- (1) N $\frac{1}{2}$, NE $\frac{1}{4}$, NE $\frac{1}{4}$ Sec. 27 T142N R58W.
- (2) NW $\frac{1}{4}$, SE $\frac{1}{4}$, and NE $\frac{1}{4}$, SE $\frac{1}{4}$ Sec. 28 T142N R58W.
- (3) E $\frac{1}{2}$, NE $\frac{1}{4}$, NW $\frac{1}{4}$ Sec. 34 T142N R58W.
- (4) N $\frac{1}{2}$, SE $\frac{1}{4}$, SE $\frac{1}{4}$ Sec. 31 T142N R58W.

b. An approximately quarter-mile long proposed access road to the Lake Ashtabula shoreline from stockpile area (2) above. This road is located in the SE $\frac{1}{4}$, NW $\frac{1}{4}$, SE $\frac{1}{4}$ Sec. 28 T142N R58W. The right-of-way corridor along the access road is 50 feet wide.

5.00 PERFORMANCE SPECIFICATIONS

5.01 The Contractor will utilize a systematic, interdisciplinary approach in conducting the study. The Contractor will provide specialized knowledge and skills during the course of the study to include expertise in archaeology and other social and natural sciences as required. Personnel involved with the work under this contract must meet the minimum professional qualifications outlined in Appendix B.

5.02 The extent and character of the work to be accomplished will be subject to the general supervision, direction, control, and approval of the Contracting Officer.

5.03 Techniques and methodologies used during the investigation by the Contractor shall be representative of the current state of knowledge for their respective disciplines.

5.04 The Contractor shall keep standard field records which shall include, but not be limited to, field notebooks, site survey forms, field maps, and photographs.

5.05 The tested areas will be returned as closely as practical to presurvey conditions by the Contractor.

5.06 The recommended professional treatment of recovered materials is curation and storage of the artifacts at an institution that can properly insure their preservation and that will make them available for research and public view. If such materials are not in Federal ownership, the consent of the owner must be obtained, in accordance with applicable law, concerning the disposition of the materials after completion of the report. The Contractor will be responsible for making curatorial arrangements for any collections which are obtained. Such arrangements must be coordinated with the appropriate officials of Minnesota and approved by the Contracting Officer.

5.07 Should it become necessary in the performance of the work and services, the Contractor shall, at no cost to the Government, secure the rights of ingress and egress on properties not owned or controlled by the Government. The Contractor shall secure the consent of the owner, his representative, or agent, in writing prior to effecting entry on such property. If requested, a letter of introduction signed by the District Engineer can be provided to explain the project purposes and request the cooperation of landowners. Where a landowner denies permission for survey, the Contractor shall immediately notify the Contracting Officer and shall describe the extent of the property to be excluded from the survey.

5.08 When sites are not wholly contained within the right-of-way limits, the Contractor shall survey an area outside the right-of-way limits large enough to include the entire site within the survey area. This procedure shall be done in an effort to delineate site boundaries and to determine the degree to which the site will be impacted.

Phase I Survey

5.09 The on-the-ground examination will be a reconnaissance level survey and shovel testing of the area of sufficient intensity to determine the number and extent of cultural resources present. This includes standing structures as well as historical and prehistorical archaeological sites.

5.10 The survey shall include surface inspection in areas where surface visibility permits adequate recovery of cultural materials and subsurface testing where surface visibility is limited. Subsurface investigation may include test pits, corings, or cut bank profiles where appropriate.

5.11 The recommended grid or transect interval is 15 meters (50 feet). However, this interval may vary depending upon field conditions. If the recommended interval is not used, justification should be presented for selection of an alternate interval. All tests will be screened through 1/4-inch mesh.

6.00 GENERAL REPORT REQUIREMENTS

6.01 Upon completion of field work, the Contractor will submit to the Contracting Officer a brief report detailing the work accomplished. Upon completion of all field investigations and research, the Contractor shall prepare

a technical report detailing the work done, the results, and the recommendations for testing and associated time and cost estimates for those resources found to have potential for the National Register.

6.02 The technical report shall include, but not be limited to, the following sections. These sections do not necessarily need to be discrete sections; however, they should be readily discernable to the reader.

a. Title page: The title page should provide the following information: the type of survey undertaken (reconnaissance, intensive); the cultural resources assessed (archaeological, historical, architectural); the project name and location (county and State); the date of the report; the Contractor's name; the contract number; the name of the author(s) and/or Principal Investigator; the signature of the Principal Investigator; and the agency for which the report is being prepared.

b. Administrative Summary: The summary will be a synopsis of the report, defining the project area and the level of the cultural resources investigation. It shall summarize the research objectives and problems, methods, numbers, and types of resources identified, the significant recommendations, and any unusual or innovative findings or techniques developed during the course of the investigation. Because this information will serve both as an administrative summary and as a portion of that information required by the Department of the Interior for its annual report to Congress (pursuant to Section 5.c. of the Reservoir Salvage Act as amended), the summary should be as detailed and succinct as possible. Normally, the summary will not exceed one typewritten page.

c. Table of Contents.

d. Introduction: This section should include the purpose of the report; a description of the proposed project; the location of the proposed project, including a map of the general area; and a project map (a list of USGS quadrangle maps which cover the project area should also be included); and the dates during which the field survey was conducted. The introduction shall also contain the name of the institution where recovered materials will be curated.

e. Environmental Setting: This section should contain a brief description of the environment of the study area, both present and past conditions, and it should be of a length commensurate with other sections of supporting type information.

f. Field Methods: This section should give an explicit statement of testing and survey methods and rationale. It should describe the areas which were surveyed (types of ground cover, degree of surface visibility, etc.) whether or not the survey resulted in the location of any cultural resources, the methods used to survey the area (pedestrian reconnaissance, subsurface test, etc.), the rationale for eliminating uninvestigated areas, the estimated size of the investigated sample and its relationship to the sample universe (e.g., 100 acres representing 15 percent percent of the project impact area), and the grid of transect interval used. Testing methods should include descriptions of test units (size, intervals, depth) and the rationale behind their placement.

g. Laboratory Methods: This section should explain in detail the laboratory methods employed and the rationale behind the method selected. This section should also contain references to accession numbers used for all collections, photographs and field notes obtained during the study, and the location where they are permanently housed.

h. Summary of Regional Prehistory and History: This section should discuss the regional cultural developments in their spatial and chronological position.

i. Investigation Results: This section should describe the historical as well as the prehistoric and historic archaeological resources encountered in the survey, with each site discussed as a separate unit. The site description should include the size of the site, type of site (i.e., historic dwelling, prehistoric village, mound group, etc.); the cultural component(s) of the site (if discernable); and the general nature of the site as it existed at the time of the survey. An inventory of cultural material recovered from sites may be included in this section or added to the site survey forms. Accession numbers for collected cultural material should be included as a part of the inventory. Inventoried sites shall include a site number. Official site designations assigned by an appropriate State agency are preferred. However, if temporary site numbers will be used in either the draft or final reports, they shall be substantially different from the official site designations to avoid confusion or duplication of site numbers.

j. Recommendations: This section should discuss the direct and indirect impacts that the proposed project will have on cultural resources. For those sites encountered, the Contractor shall make recommendations for the adequate assessments of those sites considered to have potential for eligibility to the National Register of Historic Places. This assessment will not proceed to the level described in paragraph 3.06. These recommendations should include a time and cost estimate. If it is the Contractor's assessment that no significant resources exist in the project areas, the methods of investigation and reasoning which support that conclusion will be presented. If certain areas are not accessible, recommendations will be made for future consideration. If it is found that significant resources do exist in the area, the report will describe the information recovered and where the resources were located, and will assess the extent and potential of the recovered information. Any evidence of cultural resources or materials which have been previously disturbed or destroyed will be presented and explained.

k. References: All references must follow American Antiquity format.

l. Appendix: This section should contain the Scope of Work and the resumes of the Principal Investigator and crew. State site forms shall also be included as an appendix.

m. All sites identified in the course of the study, including find spots and known sites, will be presented on State site forms as an appendix to the report. Data should also be provided about the present condition of the sites (disturbance by natural or manmade processes) and content of any collections from the sites. Known sites shall have their State site forms updated as necessary. All State site forms will be submitted to the State Archaeologist.

n. The location of all sites and other features discussed in the text will be shown on 8½ X 11 inch legibly photocopied USGS map sections and will be bound into the report. Project maps shall also be included as part of contract correspondence showing the relationship of sites to the project areas. Maps should also show the type of survey method employed for each area surveyed (example, pedestrian walkover, shovel tests) and formal test pits, if applicable. All maps will be labeled with a description, a north arrow, a scale bar, township and range (on USGS maps only), and the map source (e.g., the USGS quad name or published source).

o. Failure to fulfill these report requirements will result in the rejection of the report by the Contracting Officer.

7.00 FORMAT SPECIFICATIONS

7.01 Text materials will be typed (single-spaced or space-and-a-half) on good quality bond paper, 8.5 inches by 11.0 inches, with a 1.5-inch binding margin on the left, 1-inch margins on the top and right, and a 1.5-inch margin at the bottom. The report will be printed on both sides of the paper.

7.02 Information will be presented in textual, tabular, and graphic forms, whichever are most appropriate, effective, or advantageous to communicate the necessary information.

7.03 All figures must be readily reproducible by standard xerographic equipment.

7.04 Negatives of all black and white photographs contained in the final report must be included so that copies for distribution can be made.

8.00 SUBMITTALS

8.01 The Contractor will submit reports according to the following schedules:

a. Brief Field Report: The original and one copy will be submitted upon completion of field work.

b. Draft Final Report: The original and six copies will be submitted calendar days after contract award. The Contracting Officer will provide the Contractor with comments on this draft report.

c. Revised Final Report: The original and 8 copies will be submitted calendar days after receipt of all comments by the Contractor. This final report will include appropriate revisions in response to the Contracting Officer's comments.

8.02 The Contractor shall not release any sketch, photograph, report, or other material of any nature obtained or prepared under this contract without specific written approval of the Contracting Officer prior to the acceptance of the final report by the Government.

9.00 METHOD OF PAYMENT

9.01 Requests for partial payment under this fixed price contract shall be made monthly on ENG Form 93. A 10-percent retained percentage will be withheld from each partial payment. Upon approval of the final reports by the Contracting Officer, final payment, including previously retained percentage, shall be made.

Michael L. Gregg, Ph.D.

PII Redacted

Area of special interest: hunter-gatherers, chipped stone and cultural resource management

Academic background:

High school: Milwaukee Pulaski; Milwaukee, Wisconsin
Undergraduate school: Marquette University, 1961-1963
St. Norbert College, 1963-1965
University of Wisconsin-Milwaukee, 1965-1966
Graduate school: University of Wisconsin-Milwaukee, 1970-1975

Degrees:

B.S. in zoology, University of Wisconsin-Milwaukee, 1966
M.S. in anthropology, University of Wisconsin-Milwaukee, 1971
Ph.D. in anthropology, University of Wisconsin-Milwaukee, 1975

Job history

- 1970 Part-time Teaching Assistant in anthropology, University of Wisconsin-Milwaukee
Student at the University of Arizona's Graduate Archaeological Field School at the Grasshopper Ruin
- 1971 Part-time Teaching Assistant in anthropology, University of Wisconsin-Milwaukee
Laborer, University of Wisconsin-Milwaukee Cahokia Project, Excavation of the 1st Terrace of Monks Mound
- 1972 Part-time Teaching Assistant in anthropology, University of Wisconsin-Milwaukee
Field Supervisor for Project Number 11, Historic Sites Survey (Illinois): An Archaeological Survey of the Illinois Side of the Mississippi River Valley from the Mouth of the Des Moines River to the Wisconsin Border
Archaeological survey contracted through the Illinois Archaeological Survey for Interstate Power Co. in Thomson, Illinois
- 1973 Field Supervisor, Archaeological survey contracted by Dr. William P. McHugh for Bear Creek Mining Co., Ladysmith, Wisconsin
Project Director, under the sponsorship of Dr. Melvin L. Fowler and NSF grant GS-38140 funding, for Horseshoe Lake Site (11-MS-37) investigations
Research Assistant in anthropology, University of Wisconsin-Milwaukee.
- 1974 Field Supervisor, archaeological survey contracted by Dr. Melvin L. Fowler for Wisconsin Electric Power Co., Kenosha, Wisconsin.

Job history (contd.):

- 1974 Field and laboratory supervisor, UWM Archaeological Research Laboratories, archeological assessment for Commonwealth Edison, Savanna, IL.
- 1975 Field and laboratory director, UWM Archaeological Research Laboratories, archeological inventory for the US Army Corps of Engineers, Rock Island District, Albany, Illinois.
- Principal Investigator, Great Lakes Archaeological Research Center, archeological survey for the Brown County Solid Waste Systems Office, Green Bay, WI.
- Museum Scientific Assistant, History Department, Milwaukee Public Museum.
- 1976 Research Archaeologist, Archaeological Division, Mineral Research Center, Butte, MT.
- Project Director, archeological survey of the Big Horn Tract, Sheridan County, WY for Big Horn Coal.
- Project Director, archeological survey of the Holmes-Decker Tract, Big Horn County, MT for Decker Coal.
- Project Director, archeological survey of the Pearl Tract, Big Horn County, MT for Shell Oil.
- 1977 Manager, Cultural Resources Division, Mineral Research Center, Butte, MT.
- Project Director, archeological survey of the Missouri Breaks Region, MT for BLM.
- Principal Investigator, controlled surface collection of the Bunny Chase archeological site, Big Horn County, MT for Shell Oil.
- Principal Investigator, cultural resources inventory of the Kiewit-Whitney tract, Sheridan County, WY for Big Horn Coal
- Principal Investigator, cultural resources inventory of the PN Bridge area at Judith Landing, MT for BLM.
- Principal Investigator, archeological excavation of the Big Creek Lake site, Bitterroot Mountains, MT for Interagency Archeological Services-Denver.
- 1978 Manager, Cultural Resources Division, Mineral Research Center, Butte, MT.
- Principal Investigator, cultural resources inventory of the Decker-Pearson Creek tract, Big Horn County, MT for Decker Coal Company.

Job history (contd.):

1978 Principal Investigator, cultural resources inventory near Ashland, MT for MONTICO.

Principal Investigator, cultural resources inventory near Ekalaka, MT for Mid-Rivers Telephone.

Principal Investigator, cultural resources inventory near Lemhi Pass, MT for Idaho Power.

Principal Investigator, archaeological excavation of the Homestead Kill site, Rosebud County, MT for Western Energy Company.

1979 Manager, Cultural Resources Division, Mineral Research Center, Butte, MT (resigned in August)

Principal Investigator, numerous cultural resource inventories in southwestern Montana for Montana Department of Highways.

Principal Investigator, cultural resource inventory of Big Sky Mine Area A, Rosebud County, MT for Peabody Coal.

Principal Investigator, cultural resource inventory of the Jensik Hill and SE Extension tracts, Sheridan County, WY for Big Horn Coal.

Principal Investigator, cultural resources inventory of powerline r.o.w., Broadview to Roundup, MT for Montana Power.

1979 Research Director, UNDAR, Department of Anthropology and Archaeology, University of North Dakota.

Associations:

Society of Professional Archaeologists

Society for American Archaeology

Organizer and Chairperson for Middle-Late Woodland Continuities in Northeastern North America symposium, 1976 meetings.

Montana Archaeological Society, Board Directors(1977-1978), President (1979)

Wisconsin Archaeological Society

Program Chariman (1975-1976), Board of Directors (1975-1977)

Illinois Archaeological Survey (1974-1976)

Wisconsin Archaeological Survey (1975-1976), Board of Directors (1976)

Western Association of Sociology and Anthropology

Papers delivered

- 1972 Biological resource base and area ecology; University of Wisconsin-Milwaukee Cahokia archaeology project. Paper presented at 1972 Meeting of the Society for American Archaeology, Bal Harbour, Florida.
- Field report of Historic Sites Survey project number 11. Paper presented at 1972 Meeting of the Workshop on Illinois Archaeology, Springfield, Illinois.
- 1973 The Horseshoe Lake site: a satellite community of the central Cahokia complex. Paper presented at 1973 Meeting of the Midwest Archaeological Conference, East Lansing, Michigan.
- 1974 Flintknapping as a mortuary activity: evidence from Mound 72 at Cahokia. Paper presented at 1974 Meeting of the Society for American Archaeology, Washington, D.C.
- Fairmount Phase temple mound construction at the Horseshoe Lake site (11-MS-37). Paper presented at 1974 Meeting of the Workshop on Illinois Archaeology, Decatur, Illinois.
- 1975 Contract archaeology at the Albany Mounds Site, Whiteside County, Illinois. Paper presented at 1975 Meeting of the Midwestern Archaeological Conference, Ann Arbor (With E. Benchley).
- 1976 Middle-Late Woodland continuity in northeastern North America. Paper presented at 1976 Meeting of the Society for American Archaeology, St. Louis, Missouri.
- 1977 Surface site significance in the upper Tongue River drainage. Paper presented at 1977 Meeting of the Montana Archaeological Society, Butte, Montana

Research Grants Received:

- 1973 National Science Foundation Grant GS-38140, a Doctoral Dissertation Research Improvement Grant (\$7,700), under the sponsorship of Dr. Melvin L. Fowler, Department of Anthropology, University of Wisconsin-Milwaukee.

Publications

Benchley, Elizabeth, and Michael L. Gregg

- 1975 Final report of an intensive archaeological survey of the Meredosia Levee Project. Archaeological Research Laboratories, Department of Anthropology, University of Wisconsin-Milwaukee.

Benchley, Elizabeth, Michael Gregg, and Mark J. Dudzik

- 1977 Recent investigations at Albany Mounds, Whiteside County, Illinois. Illinois Archaeological Survey, Circular 2.

Gregg, Michael L.

- 1974 Three Middle Woodland sites from Henderson County, Illinois: an apparent congruity with Middle Woodland subsistence-settlement systems in the lower Illinois Valley. The Wisconsin Archaeologist 55(3): 231-245.
- 1975 Settlement morphology and production specialization: the Lake Site, a case study. Ph. D. disseration, University of Wisconsin-Milwaukee. University Microfilms, Ann Arbor.
- 1975 Test excavations at two sites in northwestern Illinois. The Wisconsin Archaeologist 56(3): 174-200.
- 1975 Fairmount Phase temple mound construction at the Horeshoe Lake Site, Madison County, Illinois. Illinois Association for Advancement of Archaeology, Quartely Newsletter 7(2,3): 12:18.
- 1976 A population estimate for Cahokia. In Perspectives in Cahokia archaeology, edited by James A. Brown. Illinois Archaeological Survey, Bulletin 10:126-136.
- 1977 1976 Holmes-Decker archaeological survey. Montana Tech Alumni Foundation, Mineral Research Center, Archaeology and Cultural Resources Division, Reports of Investigations 2. Butte.
- 1977 Archeological survey of the Pearl area. Montana Tech Alumni Foundation, Mineral Research Center, Archaeology and Cultural Resources Division, Reports of Investigations 3. Butte.
- 1977 Archeological survey at CX Decker(1976-1977). Montana Tech Alumni Foundation, Mineral Research Center, Archeology and Cultural Resources Division, Reports of Investigations 5. Butte
- 1977 Final report: archcological inventory and assessment for the Mystic Lake Project. Cultural Resources Division, Mineral Research Center, Butte.
- 1978 Archeological values on Kiewit-Whitney, Sheridan County, Wyoming. Montana Tech Alumni Foundation, Mineral Research Center, Cultural Resources Division, Reports of Investigations 6. Butte

Publications (contd.):

- 1978 Cultural resources inventory and evaluation in the South Bearpaw Planning Unit, Montana. Montana Tech Alumni Foundation, Mineral Research Center, Cultural Resources Division, Reports of Investigations 7. Butte.
- 1979 Inventory and assessment of archeological remains on Decker Pearson Creek. Montana Tech Alumni Foundation, Mineral Research Center, Cultural Resources Division, Butte.
- Gregg, Michael L., and Richard J. Grybush
- 1976 Thermally altered siliceous stone from prehistoric contexts: intentional vs unintentional alteration. American Antiquity 41(2): 189-192.
- Howard, Elaine B., Susan W. Curtis, Michael L. Gregg, and Susan Albert
- 1978 Archeological and historical sites survey, PN Bridge area, Missouri Wild and Scenic River. Montana Tech Alumni Foundation, Mineral Research Center, Cultural Resources Division, Reports of Investigations 9. Butte.